INSTALLATION GUIDE

XT LITE™ PANEL

DMP

Digital Monitoring Products

MODEL XTL
INSTALLATION GUIDE

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device has been designed to operate with the integrated PCB antenna having a maximum gain of 1.8 dB. Antennas having a gain greater than 1.8 dB are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

If necessary, the installer should consult the dealer or an experienced radio/television technician for additional suggestions. The installer may find the following booklet, prepared by the Federal Communications Commission, helpful:

"How to identify and Resolve Radio-TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402

Stock No. 004-000-00345-4

TABLE OF CONTENTS

Panel Specifications

1.1 Power Supply

Input: 12 VDC

Standby Battery: 3.7 VDC Lithium

All circuits inherent power limited

1.2 Communication

Built-in Cellular communication to DMP Model SCS-1R Receivers. Cellular Service is required before using the XTL for signal transmission. The XTL panel comes with a SIM card ready for activation with SecureCom Wireless, LLC. More information is available at www.securecomwireless.com.

1.3 Keypads

You can connect up to 4 alphanumeric 9000 Series wireless keypads.

1.4 Number of Zones

- XTL has 28 wireless initiating zones numbered 1-28
- Zone numbers 31 to 34 and 41 to 44 can support 1100 Series Key Fobs or DMP wireless output modules

1.5 Enclosure Specifications

The XTL panel ships in a plastic enclosure with a user's guide and programming sheet.

Size	Color
5.58" W x 3.75" H x 1" D	White (W)

Introduction

2.1   System Configurations
The panel can be programmed to operate as any of the following system types:

- All/Perimeter system that provides one perimeter area and one interior area
- Home/Sleep/Away system that provides one perimeter, one interior, and one bedroom area. The bedroom area provides for any protection devices the user wants disarmed during their sleeping hours and armed in the Away mode.
- Six area system that provides areas of protection that can be independently armed or disarmed.

2.2   Caution Notes
Throughout this guide you will see caution notes containing information you need to know when installing the panel. These cautions are indicated with a yield sign. Whenever you see a caution note, make sure you completely read and understand its information. Failing to follow the caution note can cause damage to the equipment or improper operation of one or more components in the system.

2.3   Compliance Instructions
For applications that must conform to a local authorities installation standard or a National Recognized Testing Laboratory certificated system, please see the Listed Compliance Specifications section near the end of this guide for additional instructions.

System Components

3.1   Accessory Devices

DMP Two-Way Wireless Devices	
1100R Repeater	Provides additional range for wireless devices.
1101 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.
1102 Universal Transmitter	Provides one external contact.
1103 Universal Transmitter	Provides both and internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter. Requires EOL resistor for external contact.
1105 Universal Transmitter	Provides both internal and external contacts that may be used at the same time to yield two individual reporting zones from one wireless transmitter.
*1114 Four-Zone Expander	Provides four wireless zones with EOL resisters.
*1116 Relay Output	Provides one Form C relay.
*1117 LED Annunciator	Provides a visual system status indicator.
*1119 Door Sounder	Provides a battery operated sounder
*1121 PIR Motion Detector	Provides motion detection with pet immunity.
1125 PIR Motion Detector	Provides multiple lens configurations, dual coverage area selection, and sensitivity adjustments.
*1126C/*1126R/*1126W PIR Motion Detector	Ceiling mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
1127C/1127W PIR Motion Detector	Wall mount motion detector with panel programmable sensitivity and Disarm/Disable functionality.
*1129 Glassbreak Detector	Detects the shattering of framed glass mounted in an outside wall and provides full-pattern coverage and false-alarm immunity.
*1131 Recessed Contact	Provides concealed protection for doors, windows or other applications.
1135 Siren	Provides a battery operated siren
*1139 Bill Trap	Provides a silent alarm option for retail and banking cash drawers.
1142BC Two-button Panic Belt Clip Transmitter	Provides portable two-button panic operation.
1142 Two-button Panic Transmitter	Provides permanently mounted under-the-counter two-button panic operation.
*1145 (Four-Button) *1146 (Two-Button) *1147 (One-Button)	Key Fob transmitters designed to clip onto a key ring or lanyard.
1161 Residential Smoke Detector	Residential smoke detector with sounder.
1162 Residential Smoke Detector	Residential smoke/heat detector with sounder and fixed rate-of-rise heat detector.
Keypads	
LCD keypads	Allows you to control the panel from various remote locations using 9000 Series Wireless Keypads.
* These devices have not been investigated and shall not be used in listed installations	

Installation

4.1   Mounting the Enclosure

The enclosure for the XTL panel must be mounted using the provided #6 screws in the four mounting holes shown in Figure 2. Mount the enclosure in a secure, dry place to protect the panel from damage due to tampering or the elements. It is not necessary to remove the PCB when installing the enclosure.
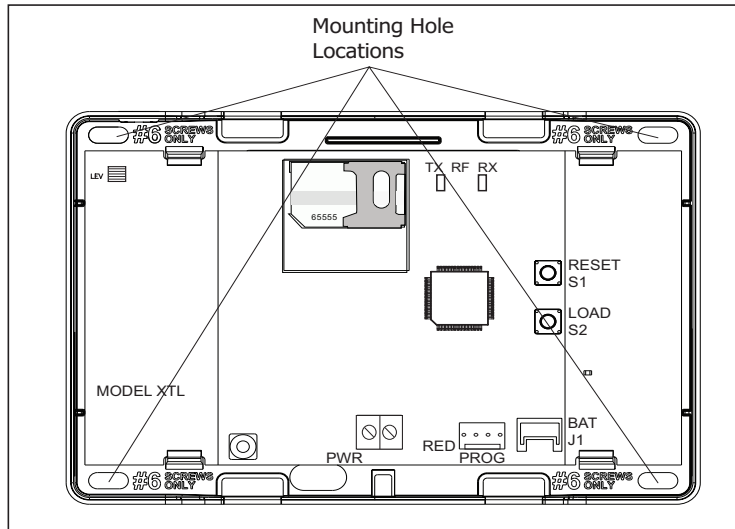
Figure 2: Mounting Hole Locations

Primary Power Supply

5.1   DC Input

Mount the XTL panel near a wall outlet for the Model 372-500 plug-in DC power supply. In addition to powering the panel, the DC plug-in power supply also charges the back-up battery. The 372-500 must be located within 100 feet of the panel using 22 AWG wire or 250 feet using 18 AWG wire. Use the following steps to connect the plug-in power supply:

1. Using 18 or 22 AWG wire, connect the panel PWR (J2) first terminal (+) to the positive terminal on the power supply.

2. Connect the panel PWR (J2) second terminal (-) to the negative terminal on the power supply.

3. Plug the power supply into a 110 Volt AC dedicated outlet not controlled by a switch.

Figure 3: DC Power Supply Connection

Secondary Power Supply

6.1 Standby Battery
The XTL rechargeable battery is used to provide 24 hours of backup battery power when DC power is not available. The battery is intended for backup power only and not to operate the XTL panel on a daily basis. If the battery is low, or not plugged into the J1 battery connector, a low battery condition is indicated by the XTL panel.

Note: If removing the XTL panel from service, disconnect the backup battery from the XTL connector.
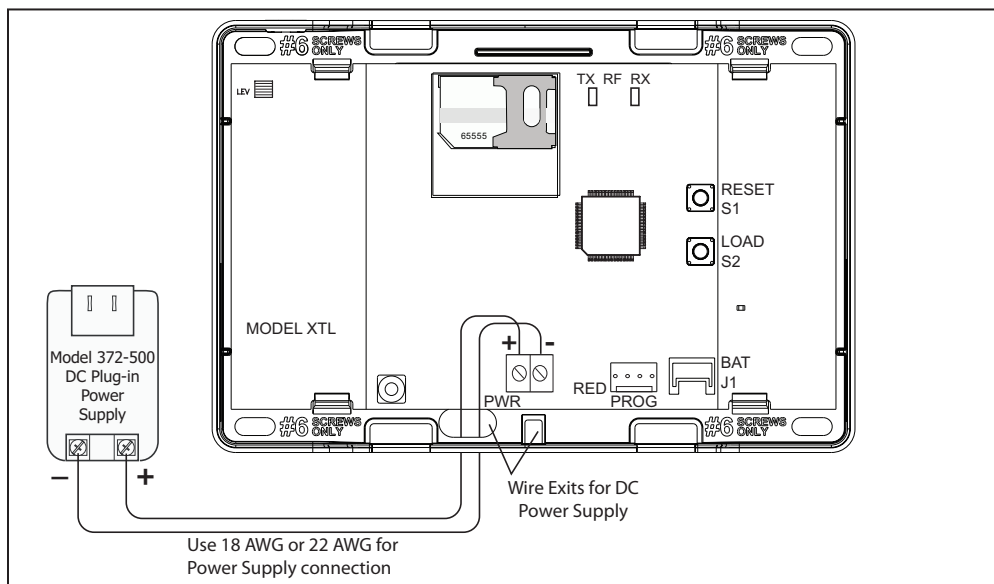
6.2 Replacement
Use the following steps to replace the XTL standby battery. DMP recommends replacing the battery every 3 years under normal use.
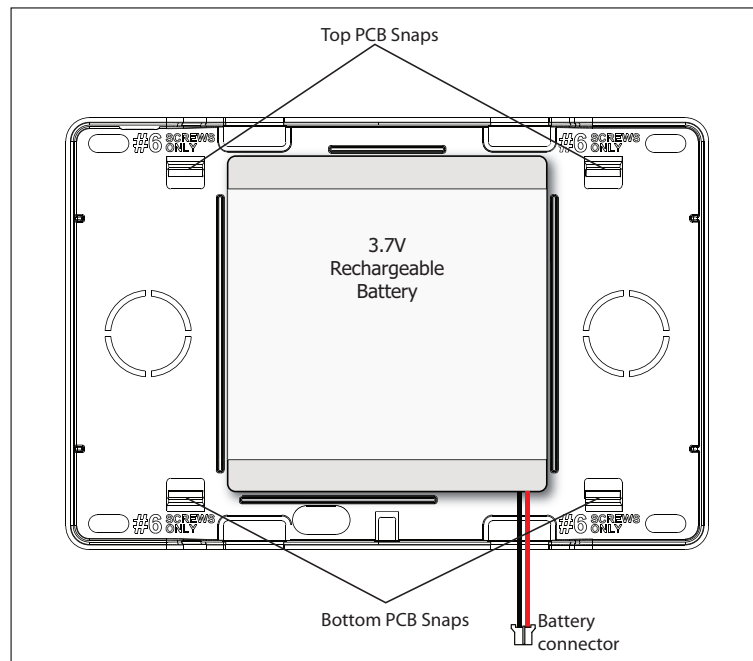
Figure 4: Standby Battery Replacement

1. Unplug the battery connector (J1) from the XTL panel.
2. Loosen the top PCB snaps.
3. Lean the panel PCB forward and lift out from the bottom PCB snaps.
4. Remove and properly dispose of the used battery.

    Caution: Risk of fire, explosion, and burns. Do not disassemble, heat above 212°F (100°C), or incinerate. Properly dispose of used batteries.

5. Place the new battery into the XTL housing base with the battery wires directed toward the bottom right corner. See Figure 4.
6. Set the XTL PCB into the bottom snaps and press into the top snaps to secure in place.
7. Plug the battery into the panel connector (J1).

6.3 Battery Supervision
The panel tests the battery once every hour when DC power is present. This test occurs 15 minutes past each hour and lasts for five seconds. A load is placed on the battery and if the battery voltage is low, a low battery is detected. If DC power has failed, a low battery is detected any time the battery voltage falls below 3.7V.

LED Operation

7.1 Backlit Logo

The backlit logo indicates the Power and Armed status of the panel. Depending on the operation, the LED displays in Red or Green as listed in the table.

Color and Activity	Operation
Green Steady	Panel Disarmed, AC Power OK, Battery OK
Green Blinking	Panel Disarmed, AC Power OK, Battery Fault
No Light	Panel Disarmed, AC Power Fault, Battery OK
Red Steady	Panel Armed, AC Power OK, Battery OK
Red/Green Alternate	Panel Armed, AC Power OK, Battery Fault
Red Blinking	Panel Armed, AC Power Fault, Battery OK

Reset Button

8.1 Description

The reset button (S1) is located on the right side of the circuit board and is used to reset the XTL microprocessor. To reset the panel when first installing the system, press the reset button after applying power to the panel.

To reset the panel while the system is operational, for example, prior to reprogramming, press the reset button for 1-2 seconds without powering down the system. After resetting the panel, begin programming within 30 minutes. If you wait longer than 30 minutes, you must reset the panel again.

Programming Connection

9.1 Programming Connection

A locking 4-pin header (PROG) is provided to connect a keypad when using a DMP Model 330 Programming Cable. This provides a quick and easy connection for programming the XTL panel. After programming is complete, remove the keypad.

Note: The PROG header does not provide a Keypad Data Bus connection.

On-Board 1100 Series Wireless

10.1 Wireless Antenna

The XTL Wireless Antenna is integrated into the circuit board. The XTL built-in wireless receiver operates with DMP 1100 Series transmitters. See section 3.1 for a list of accessory devices.

10.2 LED Operation

Green (TX): The green LED flashes every time the receiver transmits (32 times per second). If a house code is not programmed in the panel, the panel is reset, or the panel is powered off, the green LED is off. Under normal operation, the green LED flashes constantly with no interruption or change.

Yellow (RX): The yellow LED flashes every time the receiver hears a message from a programmed wireless transmitter. When a message is sent by a transmitter, typically by pressing or releasing the tamper switch, the yellow LED should flash indicating that the receiver received a message from the transmitter. If the LED never flashes, the transmitter is not getting through to the receiver. This could be because of a misprogrammed serial number or the transmitter is too far away. Under normal operation, the yellow LED flashes at every trip of every wireless transmitter and occasionally when the transmitters perform their periodic check-in. It is not unusual for this LED to stay off for many minutes at a time when no transmitters are communicating.

Wireless Keypads

11.1 Mounting Keypads

DMP keypads have removable covers that allow the base to be mounted on a wall or other flat surface using the screw holes provided on each corner.

11.2 Wireless Keypad Association

Pressing the reset button 3 times within 5 seconds enables the keypad association mode. For one minute the panel listens for wireless keypads. Any keypads not already associated with another panel are accepted. The first keypad detected is assigned to the first open keypad address. Keypads are automatically assigned addresses based upon the order in which they are detected. A maximum of 4 keypads may be associated with a panel.

11.3 Existing Keypad Confirmation

During the one minute time period, the panel also confirms that programmed keypads are still functioning.

Wireless Zones

12.1 Description

XTL panels provide 28 wireless zones numbered 1 to 28. The default zone names are described below.

Zone Number	Zone Name	Zone Type	Area Assignment
1	FRONT DOOR	EX	PERIM
2	BACK DOOR	EX	PERIM
3	INTERIOR DOOR	NT	INT
4	UPSTAIRS DOOR	EX	PERIM
5	BASEMENT DOOR	EX	PERIM
6	GARAGE DOOR	EX	PERIM
7	WAREHOUSE DOOR	EX	PERIM
8	SHIPPING DOOR	EX	PERIM
9	BREAKROOM DOOR	NT	INT
10	STOCKROOM DOOR	NT	INT
11	FRONT MOTION	NT	INT
12	BACK MOTION	NT	INT
13	INTERIOR MOTION	NT	INT
14	UPSTAIRS MOTION	NT	INT
15	BASEMENT MOTION	NT	INT
16	GARAGE MOTION	NT	INT
17	GLASSBREAK	NT	INT
18	WATER DETECTOR	AUX 1	INT
19	LOW TEMPERATURE	AUX 1	INT
20	SMOKE DETECTOR	FI	
21	FRONT SMOKE	FI	
22	BACK SMOKE	FI	
23	INTERIOR SMOKE	FI	
24	UPSTAIRS SMOKE	FI	
25	BASEMENT SMOKE	FI	
26	GARAGE SMOKE	FI	
27	WAREHOUSE SMOKE	FI	
28	SHIPPING SMOKE	FI	

Flash Load Button

13.1 Description

The XTL panel software can be updated via the panel's programming (PROG) header. To update the panel with a new software version, complete the following steps at the protected premise:

1. Connect a DMP 399 Cable from the Programming Header to the serial port of your PC operating Remote Link and containing the XTL RU file.

3. Start Remote Link and create or open the XTL control panel account that matches the panel to be updated.

4. Set the Connection Information Type to Direct with a baud rate of 38400 and choose the appropriate COM port.

5. Select Panel>Remote Update, then select the correct RU file for the XT panel model.

6. Press and hold the LOAD button (S2), then press and release the RESET button.

7. Release the LOAD button and click <Update> in Remote Link.

8. After the software update is completed, remove the 399 cable and press the RESET button to resume normal panel operation.

Listed Compliance Specifications

14.1 Introduction
The programming and installation specifications contained in this section must be completed when installing the XTL in accordance with any of the ANSI/UL burglary standards. Additional specifications may be required by a particular standard.

14.2 Use Marking
Commercial Central Station; Household Fire and Burglar Warning System Control Unit (Cellular)

14.3 NFPA 72
This equipment should be installed in accordance with Chapter 11 of the National Fire Alarm Code, ANSI/NFPA 72-2002, (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269). Printed information describing proper installation, operation, testing, maintenance, evacuation planning, and repair service is to be provided with this equipment. Warning: Owner's instruction notice, not to be removed by anyone except occupant.

14.4 Types Of Service
Suitable for Central Station Standard Line Security. Suitable for Household Fire and Household Burglary. Test weekly.

14.5 Bypass Reports
The bypass reports must be programmed as YES for all listed burglary applications.

14.6 Battery Standby
The XTL is shipped with a battery for 24 hour battery standby operation.

Household Burglar-Alarm System Units
ANSI/UL 1023

15.1 Bell Cutoff
The bell cutoff time cannot be less than four minutes.

15.2 Entry Delay
The maximum entry delay used must not be more than 45 seconds.

15.3 Exit Delay
The maximum exit delay used must not be more than 60 seconds.

15.4 Wireless External Contact
When used, the External Contact of 1101 or 1102 must be programmed Normally Closed.

15.5 Wireless Supervision Time
The Zone Information Supervision Time cannot be set to 0 (zero).

15.6 Wireless Audible Annunciation
The Wireless Audible option must be selected as DAY for residential applications.

15.7 Panel location
Mount panel inside protected area.

15.8 Test Frequency
The Test Frequency option must be programmed to send a report at least once every 30 days.

Central Station Burglar Alarm Units
ANSI/UL 1610

16.1 Standard Line Security

Standard Line Security is provided when the Check-in time is set to 3 minutes. When programmed for Standard Line Security, Exit Time Restart is disabled.

Note: The SecureCom Wireless text plan selected for the panel should match or exceed the programmed Monthly Limit or additional cellular charges may apply.

16.2 Remote Disarm

REMOTE DISARM must be programmed as NO.

16.3 Central Station

MESSAGE TO TRANSMIT programming for zones must not be set to LOCAL (L).

Household Fire Warning System
ANSI/UL 985 NFPA 72 Specifications

17.1 Bell Output Definition

The bell output of the XTL panel must be programmed to operate steady on burglary alarms and temporal on fire alarms. See the XTL Programming Guide.

17.2 Household System

An alarm sounding device must be installed indoors so that it is clearly heard in all sleeping areas.

17.3 Wireless External Contact

When used, the External Contact of 1101 or 1102 must be programmed Normally Closed. See the XTL Programming Guide.

17.4 Wireless Supervision Time

The Zone Information Supervision Time must be 3 minutes for fire devices. See the XTL Programming Guide.

17.5 Wireless Fire Verification

When used, the Model 1161 and 1162 wireless smoke detectors must not be programmed as Fire Verification (FV) zone type. See the XTL Programming Guide.

17.6 Battery Standby

For UL listed applications, the panel must have 24 hour battery standby operation.

17.7 Test Frequency

The Test Frequency option must be programmed to send a report at least once every 30 days.

False Alarm Reduction Programmable Options ANSI/SIA CP-01-2007

18.1 Shipping Defaults and Recommended Programming

SIA CP-01 FEATURE PARAGRAPH # AND DESCRIPTION	DMP PROGRAMMING GUIDE LT-1108 SECTION #	REQUIREMENT	RANGE	SHIPPING DEFAULT	RECOMMENDED PROGRAMMING*
4.2.2.1 Exit Time	8.6 Exit Delay	Required (Programmable)	45 sec. - 250 sec.	60 Seconds	60 Seconds
4.2.2.2 Progress Annunciation	13.14 Prewarn Address	Allowed	Individual keypads may be disabled per zone	All keypads enabled	All keypads enabled
4.2.2.3 Exit Time Restart	8.6 Exit Delay	Required Option	For re-entry during exit time	Enabled	Enabled
4.2.2.5 Auto Stay Arm on Unvacated Premises	8.17 Occupied Premise - See Install Guide	Required Option (except for remote arming)	Occupied Premise NO/YES option	Enabled	Enabled Yes for Residential Applications
4.2.4.4 Exit Time and Progress Annunciation/ Disable - for Remote Arm	Not Available on Remote Arming	Allowed Option	Progress Annunciation Always disabled for Remote Arming	Not Available	Remote Arming not allowed for CP-01 installations.
4.2.3.1 Entry Delay(s)	8.5 Entry Delay	Required (Programmable)	30 sec. – 240 Sec. **	30 Seconds	At least 30 Seconds **
4.2.5.1 Abort Window – for Non-Fire Zones	3.3 Transmit Delay	Required Option	Disable by zone or zone type	Enabled NT DY EX Zone	Enabled
4.2.5.1 Abort Window Time – for Non-Fire Zones	3.3 Transmit Delay	Required (Programmable)	20 sec., 30 sec., or 40 sec. **	30 Seconds	At least 20 Seconds **
4.2.5.1.2 Abort Annunciation	3.3 Transmit Delay	Required Option	Annunciate that no alarm was transmitted	Yes	Yes
4.2.5.4.1 Cancel Annunciation	Always Enabled - Not Programmable	Required Option	Annunciate that a Cancel was transmitted (S49)	Always Enabled	Yes
4.2.6.1 & 4.2.6.2 Duress Feature	User Code + 1 = Ambush Code Not Available	Allowed Option	No 1 + derivative of another user code/no duplicates with other user codes	Code +1 Always Disabled	Not Programmable
4.3.2 Swinger Shutdown	Not Available — Always On	Required	For all non-fire zones, shut down after 1 trip	Always On	Always On
4.3.2 Swinger Shutdown Disable	13.13 Swinger Bypass	Allowed	For non-police response zones	Yes	Enabled (all zones)
4.3.3 Fire Alarm Verification	13.5 Zone Type	Required Option	FV Type Zone	No	Yes as required (unless sensors can self verify)

* Programming at installation may be subordinate to other listed requirements for the intended application.
** For listed Installations, combined Entry Delay and Transmit Delay should not exceed 1 minute.

False Alarm Reduction Programmable Options ANSI/SIA CP-01-2007 (continued)

18.2 Entry Delay

Only use Entry Delay 1. Do not use Entry Delay 2. See the XTL Programming Guide.

18.3 Local Bell

All non-fire zones such as Night, Day, Exit, Aux1 and Aux 2 must be programmed for local bell enabled with a bell cutoff time set to a minimum of 6 minutes to provide a cancel window of 5 minutes or greater. This does not apply to manually operated zone types such as Panic and Emergency.

The requirements are superceded by any requirements for Commercial Burglar, Household Fire Warning, or Household Burglar applications.

18.4 Minimum Installation Requirements

SIA CP-01-2007 minimum system installation requirements include an XTL, an 1135 Wireless Siren, and communication to an SCS-1R receiver plus a 9000 Series Wireless keypad.

Revisions to This Document

This section explains the changes that were made to this document during this revision. This section lists the version, section number with heading, and a quick summary of the change.

Ver.   Section Number and Heading   Summary of Changes

Listings and Approvals

FCC Part 15 ID: CCKPC0117

Industry Canada ID: 5251A-PC0117

Underwriters Laboratories (UL) Listed

ANSI/UL 1023	Household Burglar
ANSI/UL 985	Household Fire Warning
ANSI/UL 1610	Central Station Burglar

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